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	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L12	l10 and (134/183 or 134/182 or 134/99.1).ccls.	16
<input type="checkbox"/>	L11	L9 and (single type)	13
<input type="checkbox"/>	L10	L9 and single\$	1227
<input type="checkbox"/>	L9	L8 and semiconductor	3202
<input type="checkbox"/>	L8	cleaning apparatus	29396

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		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L7	L5 and concrete	18
<input type="checkbox"/>	L6	L5 and (concrete waste)	0
<input type="checkbox"/>	L5	L4 and (not adher\$)	312
<input type="checkbox"/>	L4	L3 and polymer\$	502
<input type="checkbox"/>	L3	L2 and liner	3003
<input type="checkbox"/>	L2	220/\$.ccls. and container	40904
<input type="checkbox"/>	L1	220/\$.ccls. and (washout container)	0

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Search Results - Record(s) 11 through 13 of 13 returned.

☐ 11. Document ID: US 5608136 A

Using default format because multiple data bases are involved.

L11: Entry 11 of 13

File: USPT

Mar 4, 1997

US-PAT-NO: 5608136

DOCUMENT-IDENTIFIER: US 5608136 A

TITLE: Method and apparatus for pyrolytically decomposing waste plastic

DATE-ISSUED: March 4, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Maezawa; Yukishige	Tokyo			JP
Hayata; Terunobu	Kanagawa-ken			JP
Shimada; Hideki	Kanagawa-ken			JP
Ito; Isao	Chiba-ken			JP
Suzuki; Kazuo	Tokyo			JP
Tadauchi; Masahiro	Tokyo			JP
Tezuka; Fuminobu	Tokyo			JP
Kano; Jiro	Tokyo			JP

US-CL-CURRENT: 588/228; 201/2.5, 585/241, 588/213, 588/216

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw D
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☐ 12. Document ID: KR 2004015440 A

L11: Entry 12 of 13

File: DWPI

Feb 19, 2004

DERWENT-ACC-NO: 2004-458969

DERWENT-WEEK: 200443

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TITLE: Forming wiring in semiconductor manufacture

INVENTOR: HONG, U S; PARK, B R

PRIORITY-DATA: 2002KR-0047690 (August 13, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
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h e b b cg b cc e

KR 2004015440 A

February 19, 2004

001

H01L021/28

INT-CL (IPC): H01 L 21/28

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw D
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13. Document ID: KR 416592 B, US 20020108641 A1, JP 2002305175 A, KR 2002066448 A, TW 529069 A

L11: Entry 13 of 13

File: DWPI

Feb 5, 2004

DERWENT-ACC-NO: 2003-016043

DERWENT-WEEK: 200437

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TITLE: Semiconductor wafer cleaning apparatus includes gas spraying unit with injection tube oriented to inject gas towards wafer

INVENTOR: HA, S R; HAN, Y P ; LEE, G T ; HAH, S R ; HAH, S ; HAN, Y ; LEE, K

PRIORITY-DATA: 2001KR-0006623 (February 10, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
KR 416592 B	February 5, 2004		000	H01L021/304
US 20020108641 A1	August 15, 2002		009	B08B003/02
JP 2002305175 A	October 18, 2002		007	H01L021/304
KR 2002066448 A	August 17, 2002		000	H01L021/304
TW 529069 A	April 21, 2003		000	H01L021/00

INT-CL (IPC): B08 B 3/02; B08 B 5/00; H01 L 21/00; H01 L 21/304

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw D
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Term	Documents
SINGLE	3297841
SINGLES	3115
TYPE	5635300
TYPES	1743634
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(L9 AND (SINGLE TYPE)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	13

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Search Results - Record(s) 11 through 16 of 16 returned.

☐ 11. Document ID: US 6668844 B2

Using default format because multiple data bases are involved.

L12: Entry 11 of 16

File: USPT

Dec 30, 2003

US-PAT-NO: 6668844

DOCUMENT-IDENTIFIER: US 6668844 B2

TITLE: Systems and methods for processing workpieces

DATE-ISSUED: December 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lund; Eric	Kent	WA		
Lanfrankie; Joe	Kent	WA		
Lund; Gil	Kent	WA		
Scranton; Dana	Kalispell	MT		
Bergman; Eric	Kalispell	MT		

US-CL-CURRENT: 134/155, 134/137, 134/186, 134/30, 134/33, 134/902, 134/99.1, 34/165, 34/279, 34/288, 34/397, 34/444

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Draw D
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☐ 12. Document ID: US 6536452 B1

L12: Entry 12 of 16

File: USPT

Mar 25, 2003

US-PAT-NO: 6536452

DOCUMENT-IDENTIFIER: US 6536452 B1

TITLE: Processing apparatus and processing method

DATE-ISSUED: March 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kohama; Kyouji	Hachioji			JP
Shimbo; Eiji	Tokyo-To			JP
Kamikawa; Yuji	Koshi-Machi			JP
Toshima; Takayuki	Yamanashi-Ken			JP

Ohno; Hiroki

Machida

JP

US-CL-CURRENT: 134/117; 134/148, 134/157, 134/183, 134/200, 134/902

ABSTRACT:

A processing apparatus essentially includes a rotatable rotor 21 for carrying semiconductor wafers W, a motor 22 for driving to rotate the rotor 21, a plurality of processing chambers for surrounding the wafers W carried by the rotor 21, for example, an inner chamber 23 and an outer chamber 24, a chemical supplying unit 50, an IPA supplying unit 60, a rinse supplying unit 70 and a drying fluid supplying unit 80. With this constitution of the apparatus, it is possible to prevent the wafers from being contaminated due to the reaction of treatment liquids of different kinds, with the improvement of processing efficiency and miniaturization of the apparatus.

30 Claims, 24 Drawing figures

Exemplary Claim Number: 14

Number of Drawing Sheets: 21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. D
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☐ 13. Document ID: US 6261427 B1

L12: Entry 13 of 16

File: USPT

Jul 17, 2001

US-PAT-NO: 6261427

DOCUMENT-IDENTIFIER: US 6261427 B1

TITLE: System for fabricating lithographic stencil masks.

DATE-ISSUED: July 17, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rolfson; J. Brett	Boise	ID		

US-CL-CURRENT: 204/224M; 134/182, 134/94.1, 134/99.1

ABSTRACT:

A method, apparatus and system for fabricating a stencil mask for ion beam and electron beam lithography are provided. The stencil mask includes a silicon substrate, a membrane formed from the substrate, and a mask pattern formed by through openings in the membrane. The method includes defining the mask pattern and membrane area using semiconductor fabrication processes, and then forming the membrane by back side etching the substrate. The apparatus is configured to electrochemically wet etch the substrate, and to equalize pressure on either side of the substrate during the etch process. The system includes an ion implanter for defining a membrane area on the substrate, optical or e-beam pattern generators for patterning various masks on the substrate, a reactive ion etcher for etching the mask pattern in the substrate, and the apparatus for etching the back side of the substrate.

16 Claims, 17 Drawing figures
Exemplary Claim Number: 5
Number of Drawing Sheets: 3

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw De
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☐ 14. Document ID: US 6110331 A

L12: Entry 14 of 16

File: USPT

Aug 29, 2000

US-PAT-NO: 6110331
DOCUMENT-IDENTIFIER: US 6110331 A

TITLE: Apparatus and system for fabricating lithographic stencil masks

DATE-ISSUED: August 29, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rolfson; J. Brett	Boise	ID		

US-CL-CURRENT: 204/224M; 134/182, 134/94.1, 134/99.1

ABSTRACT:

A method, apparatus and system for fabricating a stencil mask for ion beam and electron beam lithography are provided. The stencil mask includes a silicon substrate, a membrane formed from the substrate, and a mask pattern formed by through openings in the membrane. The method includes defining the mask pattern and membrane area using semiconductor fabrication processes, and then forming the membrane by back side etching the substrate. The apparatus is configured to electrochemically wet etch the substrate, and to equalize pressure on either side of the substrate during the etch process. The system includes an ion implanter for defining a membrane area on the substrate, optical or e-beam pattern generators for patterning various masks on the substrate, a reactive ion etcher for etching the mask pattern in the substrate, and the apparatus for etching the back side of the substrate.

11 Claims, 17 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw De
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☐ 15. Document ID: US 5862823 A

L12: Entry 15 of 16

File: USPT

Jan 26, 1999

US-PAT-NO: 5862823
DOCUMENT-IDENTIFIER: US 5862823 A

TITLE: Substrate cleaning method and a substrate cleaning apparatus

DATE-ISSUED: January 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kamikawa; Yuji	Kumamoto-ken			JP
Shindo; Naoki	Nirasaki			JP

US-CL-CURRENT: 134/182; 134/1.3, 134/186, 134/34, 134/61, 134/902, 15/302, 15/77

ABSTRACT:

The substrate cleaning method for performing cleaning processing on a plurality of substrates disposed such that front surfaces of the substrates on which a circuit pattern is to be formed extend substantially in a vertical direction. This method includes a step of picking up substrates contained in a cassette, all together, from the cassette, a step of making front surfaces of adjacent substrates face each other without bringing the front surfaces into contact with each other, while making back surfaces of adjacent substrates face each other without bringing the back surfaces into contact with each other, the front surfaces of the adjacent substrates being situated with a pitch interval L.sub.1 interposed therebetween, and the pitch interval being set to be larger than a pitch interval L.sub.2 interposed between the back surfaces of the adjacent substrates, a step of dipping the plurality of substrates thus disposed, all together, into a chemical solution, and a step of making the chemical solution flow between the front surfaces of adjacent substrates of the plurality of substrates, facing each other, and between the back surfaces of adjacent substrates of the plurality of substrates, facing each other.

11 Claims, 23 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 15

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw De
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☐ 16. Document ID: US 5069235 A

L12: Entry 16 of 16

File: USPT

Dec 3, 1991

US-PAT-NO: 5069235

DOCUMENT-IDENTIFIER: US 5069235 A

TITLE: Apparatus for cleaning and rinsing wafers

DATE-ISSUED: December 3, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Vetter; William L.	American Fork	UT		
Mortensen; Dennis L.	Sandy	UT		

US-CL-CURRENT: [134/113](#); [134/182](#), [134/186](#), [134/902](#)

ABSTRACT:

Apparatus for cleaning and rinsing wafers is disclosed. The apparatus includes an inner tank contained within an outer tank. The inner tank has an open top forming a weir edge around the entire top of the tank. A bottom opening in the inner tank is covered by a dump door. The inner tank is contoured so that its cross-sectional area decreases in a direction toward the bottom of the tank. Sprayer manifolds are positioned slightly above the top edge of the inner tank to spray water into the inner tank. Wafers are positioned in the inner tank on a support plate. Manifolds below the support plate allow filling of the tank with water and nitrogen gas. The dump door is opened or closed by a pneumatic piston depending on whether the inner tank is being dumped or filled. A controller operates the apparatus to cycle through a predetermined program including dump, partial dump, cascade and spraying cycles. A monitoring system withdraws water from the outer tank and monitors the water for particular characteristics including resistivity, conductivity and redox potential.

16 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KUMC	Draw D
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Term	Documents
134/183	426
134/183S	0
134/182	690
134/182S	0
"134/99.1"	547
134/99.1S	0
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<input type="checkbox"/>	L9	L8 and semiconductor	3202
<input type="checkbox"/>	L8	cleaning apparatus	29396
<input type="checkbox"/>	L7	L5 and concrete	18
<input type="checkbox"/>	L6	L5 and (concrete waste)	0
<input type="checkbox"/>	L5	L4 and (not adher\$)	312
<input type="checkbox"/>	L4	L3 and polymer\$	502
<input type="checkbox"/>	L3	L2 and liner	3003
<input type="checkbox"/>	L2	220/\$.ccls. and container	40904
<input type="checkbox"/>	L1	220/\$.ccls. and (washout container)	0

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